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Thank you Mr. Chairman and distinguished members of the House Energy and Commerce Subcommittee on Oversight and Investigations for inviting me here today to discuss the administration's proposal for creating the Department of Homeland Security. I am Don Cobb, Associate Director for Threat Reduction at Los Alamos National Laboratory. At Los Alamos, I am responsible for all programs directed at reducing threats associated with weapons of mass destruction. I personally have more than 30 years experience working to reduce these threats.

Los Alamos is operated by the University of California for the DOE/NNSA and is one of three NNSA laboratories, along with Lawrence Livermore National Laboratory and Sandia National Laboratories, responsible for maintaining the nation's nuclear stockpile. In addition to our stockpile responsibilities, the three NNSA laboratories have been involved for decades in technology development and problem solving in the realm of arms control and nonproliferation. Through our work in these areas, Los Alamos has developed a skill and technology base that enabled us to respond immediately following the September 11 attacks, to calls for assistance in counter terrorism and homeland security. With the President's call for a new Department of Homeland Security, Los Alamos stands ready to focus its capabilities in support of this new department.

Today, I would like to discuss with you the broad set of capabilities that Los Alamos brings to U.S. efforts to protect our homeland from future terrorist attacks. While my testimony is Los Alamos centric, progress in science and technology depends on collaboration among the national laboratories, government, industry and academia.

Los Alamos National Laboratory firmly supports the creation of a Department of Homeland Security (DHS). Consolidation of federal homeland security agencies has the potential to protect the nation against terrorism.

The President's proposal would give the Department four divisions: Information Analysis and Infrastructure Protection; Chemical, Biological, Radiological, and Nuclear Countermeasures; Border and Transportation Security; and Emergency Preparedness and Response. Each of these mission areas will require focused research and development (R&D). My statement will describe some of the key contributions Los Alamos and the other national laboratories can make to homeland security in each of these areas.

ENGAGING THE SCIENCE AND TECHNOLOGY (S&T) COMMUNITY

"The government will need mechanisms to engage the technical capabilities of the government and the nation's scientific, engineering, and medical communities in pursuit of homeland security goals," says a new National Academies report[1]. Every division of the DHS will require research, development, testing, and evaluation (RDT&E) to solve the technical challenges it will face.

At Los Alamos, we have asked the question, "How can a newly formed DHS best engage with the S&T community, including the national laboratories, universities and industry?" I believe that in order to succeed, DHS requires a single, focused S&T office that serves as the central R&D organization for the Department. As suggested by the House and Senate bills, this office could be placed under a separate Director of Science and Technology. The best and brightest human resources, including federal staff augmented by scientists and engineers assigned from national laboratories, industry and academia, must staff this S&T office. Boundaries with other organizations must be "permeable," enabling people to move back and forth easily.

The S&T office would be responsible for the planning and oversight of focused RDT&E, including both rapid technology acquisition and long-term, high-risk, high-payoff research. Functional responsibilities for the agency would therefore include:

- Threat and vulnerability assessment;
- Identification of needs through interactions with other agencies, and with state and local governments;
- Strategic planning and prioritization for RDT&E investments;
- Program planning, budgeting, funding and oversight;
- Systems architectures;
- Science and technology acquisition from universities, industry and national laboratories;
- Technology integration;
- Evaluation of technologies and systems effectiveness; and
- Close coordination with end-users during initial system deployments.

[1] National Research Council Committee on Science and Technology for Countering Terrorism, *Making the Nation Safer: The Role of Science and Technology in Countering Terrorism* (Washington, DC: National Academy Press, June 2002).

The office should be established quickly, in place and functioning concurrently with the establishment of the DHS—we want to maintain, and even accelerate, the momentum which has built since September 11. I now will describe some of the key contributions Los Alamos is making to homeland security.

INFORMATION ANALYSIS AND INFRASTRUCTURE PROTECTION

National Infrastructure Simulation and Analysis Center (NISAC). Los Alamos is partnering with Sandia National Laboratories to establish NISAC. NISAC is intended to provide improved technical planning, simulation, and decision support for the analysis of critical infrastructures, their interdependencies, and vulnerabilities for policy analysis and emergency planning. This technology is based on a decade long, $150M investment in basic research and software development, supported by the world's largest secure, scientific computing environment. NISAC will provide the type, scale, and comprehensive level of information that will enable the nation's senior leadership proactively to deny terrorist attack options against potentially high-value targets, instead of simply reacting to the latest threat scenarios. NISAC will provide essential analytic support for discovering and overcoming gaps in our homeland security.

NISAC was created as part of the U.S.A. Patriot Act of 2001 (P.L. 107-56). The President's proposal calls for the transfer of NISAC to the DHS. Because NISAC has responsibility across all infrastructure sectors, it is appropriate that NISAC should directly support the agency charged with cross-infrastructure responsibilities. NISAC is part of a broader portfolio of infrastructure modeling and simulation work at the two laboratories. This is significant. The technical and programmatic synergies that accrue to NISAC as a result of this association allow for immediate application of the R&D efforts to real problems today. From vulnerability assessments of actual infrastructures to "what if" simulations of biological event scenarios, NISAC is providing insights and information to senior decision makers now. As this capability matures, we will do more.

National Transportation Modeling and Analysis Program (NATMAP). NATMAP, currently being developed for the Department of Transportation, builds on Los Alamos' transportation modeling technology developed over the past decade. NATMAP simulates individual

carriers—trucks, trains, planes, and waterborne vessels—and the transportation infrastructures used by these carriers to simulate freight commodity shipments of the U.S. transportation network. It moves individual freight shipments from production areas, through intermodal transfer facilities and distribution centers, to points of consumption. The advantage of the NATMAP is that the nation's system can be represented at any level of detail – from trucks and goods moving among counties and within regions, to national multi-modal traffic flows including cross border trade with Mexico and Canada. This strength can be exploited for transportation policy, security and infrastructure investment purposes.

Vulnerability/Threat Assessments: Nuclear Facilities. Over the last 20 years, Los Alamos and Sandia have analyzed physical security and identified vulnerabilities at numerous nuclear facilities throughout DOE, DoD, and U.S. Nuclear Regulatory Commission (NRC) facilities. These facilities include nuclear reactors, plutonium-handling facilities, nuclear weapons storage facilities, commercial nuclear power plants, and spent nuclear fuel facilities. We routinely train external agencies on developing protection strategies for low-probability/high-consequence scenarios, such as aircraft crash, sabotage, and fire. Fundamental to these activities are the unique facilities and capabilities that Los Alamos brings to these analyses. We are the only site where highly radioactive materials can be studied experimentally for their response to postulated threat scenarios. Such an understanding is essential for analyzing threats and their potential consequences.

Threat Analysis and Warning. Following the September 11 attacks, we established a multidisciplinary team of analysts searching for evidence of terrorist activity. Such analysis requires the latest information management technologies, advanced computational methods, and automated pattern identification to search enormous amounts of electronic information. This tremendous task is complicated by the fact that the vast majority of data represents completely innocent activity. Under the new Department, a major effort will be needed to develop the tools that will provide the ability to accurately synthesize information from intelligence, law enforcement, and open sources. Using our experience in solving related problems over the years, for example in identifying activities indicating WMD proliferation, Los Alamos will continue to provide analytic capability in this area.

Immigration and Naturalization Service: Entry/Exit System. The Immigration and Naturalization Service Data Management Improvement Act (DMIA) of 2000 (P.L 106-215) created a Task Force to evaluate how the flow of traffic at United States ports of entry can be improved while enhancing security and implementing systems for data collection and data sharing. The Task Force is advisory in nature, and as such, will develop recommendations regarding the development and deployment of an integrated, automated entry/exit system. A team of experts from Los Alamos is working with the Task Force to provide advice and objective recommendations regarding the design and development of the system.

GENetic Imagery Exploitation (GENIE). Los Alamos has developed a sophisticated image analysis technology called GENIE to create high-resolution maps. Current sensor platforms collect a flood of high-quality imagery. Automatic feature extraction is key to enabling human analysts to keep up with the flow. Machine learning tools, such as the genetic algorithm-based GENIE, have been successfully used in military and intelligence applications of broad area search and object detection, evaluation of environmental disasters, space imaging, and diagnosis from medical imagery. GENIE has been quickly deployed on a wide range of processing systems across the nation, and was recently recognized with an R&D 100 award.

Gigabit Computer Network Traffic Monitoring. Los Alamos has recently developed technology that can monitor computer network traffic at gigabit/gigabyte rates, which could be applied to the problem of terrorist activity detection. By being able to scan network traffic at gigabit rates, both for trends as well as between specific sources and destinations, our tools can be used to provide indicators or early warning of suspicious communications. While many of these traffic analysis techniques are well known, they have been limited until now by the inability to collect and process data at gigabit rates.

Geographic Information Systems (GIS). Los Alamos has high-end computer systems capable of assembling, storing, manipulating, and displaying geographically referenced information. Our GIS make it possible to link, or integrate, information that is difficult to associate through any other means. For example, a GIS might allow emergency planners to easily calculate emergency response times in the event of a disaster; we can predict water quality, air quality, contaminant transport, wildfires and other natural hazards based on defined threat scenarios. A critical component of Los Alamos' GIS is our 3D modeling and visualization capability. We can

produce wall maps and other graphics, allowing the viewer to visualize and thereby understand the results of analyses or simulations of potential events.

CHEMICAL, BIOLOGICAL, RADIOLOGICAL, AND NUCLEAR COUNTERMEASURES

The response to chemical, biological, radiological and nuclear threats necessarily take very different approaches. The dual-use nature of chemical and biological materials makes them easily accessible. For instance, feritlizer can be used to help plants grow, but the same chemicals can also be used in the construction of a bomb. In addition, hazardous microorganisms can be grown from very small starting samples. Given the prevalence of these materials, the primary focus in countering chemical and biological threats is on early detection of attack, early warning to authorities and first responders, and rapid characterization of the agent to guide response. Radiological and nuclear materials, on the other hand, have a much longer history of being regulated and safeguarded at their source. Consequently, the best way to respond to this variety of threat is to prevent terrorists from ever acquiring the necessary materials, protecting them at their source. Thus, we have an opportunity for a layered protection strategy to counter nuclear terrorism.

Chemical and Biological Countermeasures

Los Alamos has a long history of working in the biological sciences, born out of initial work done on the effects of radiation on humans. Over the years, this has developed into a significant expertise, including leadership in the international Human Genome Project and the development of now widely used biomedical technologies, based on our expertise in lasers and isotope chemistry. For example, Los Alamos created the field of flow cytometry, which allows researchers to flow objects past a laser that can rapidly answer questions about individual cells or molecules, like DNA. Thanks to this strong foundation in the biosciences, Los Alamos was able to make contributions during the recent anthrax attacks, as well as in the broader area of biothreat reduction, primarily through our work for NNSA's Chemical and Biological National Security Program (CBNP).

Field Detection and Early Identification of Pathogens

The Biological Aerosol Sentry and Information System (BASIS), a joint Los Alamos-Livermore project, provides early warning of airborne biological weapons attacks for special events such as the Olympics. Planned for use in civilian settings, BASIS can detect a biological attack within a few hours, early enough to treat exposed victims and limit casualties significantly. It was deployed at the 2002 Winter Olympics in Salt Lake City. The BASIS system incorporates distributed sampling units (sensors), a re-locatable field laboratory, and an operations center that employs a secure web-based communications system.

Advanced BASIS technology is currently being integrated into the Biosurveillance Defense Initiative. The Initiative, which is sponsored by the Defense Threat Reduction Agency of the Department of Defense and the NNSA, is a joint Los Alamos, Livermore, and Sandia program. The tri-lab effort will establish an urban test bed for biosurveillance in a U.S. metropolitan area this fall. Technologies developed by the three NNSA laboratories for early detection of biological incidents, as well as Department of Defense systems, will be included in the test bed.

Pathogen Characterization for Forensics, Attribution and Response

Once an attack has occurred, it is up to the biological science and medical communities to respond to the aftermath. These communities, Los Alamos included, responded to the challenge posed by the fall 2001 anthrax attacks. Los Alamos assisted the federal response to the attacks from the beginning, providing DNA forensics expertise to the investigation, determining what strain of anthrax was used, as well as other characteristics important for response (e.g., antibiotic resistance or genetic manipulation).

Los Alamos was able to respond to the attacks as we did because we have been working for the past ten years on analyzing the DNA of anthrax and building a comprehensive database of strains from around the world. Beyond just anthrax, the Laboratory is working on a variety of pathogen strain analysis approaches for detection, characterization and attribution of threat pathogens. This work, along with that of our colleagues at Livermore and Northern Arizona University, has provided the assays being used in BASIS. Sophisticated analysis capability resides at Los Alamos for more comprehensive pathogen characterization and, importantly, for the identification of unknown microbes.

Los Alamos works with a broad range of characterization and identification technologies. For instance, Los Alamos has established a DNA fingerprinting method for rapidly identifying the "genetic barcode" for each threat agent species. We have established an archive of such "barcodes" so that, when we conduct an analysis on a new sample, we can rapidly compare its signature to all those in the database. Additionally, if a threat pathogen is known, Los Alamos can use our DNA analysis methods to detect a broad range of agent properties that are important for understanding the attack and guiding prophylaxis and treatment; including evidence of genetic manipulation and antibiotic resistance. We can also differentiate strains of the known threat agents and can, for some species, determine their original geographic origin.

Biological Demonstration and Application Program. The forensic technologies described above, as well as routine analytical techniques, are being evaluated and standardized in the Biological Demonstration and Application Program (BDAP). BDAP is a collaborative NNSA-sponsored effort between Los Alamos, Livermore and the Northern Arizona University. The BDAP will facilitate rapid transition of NNSA-developed forensic technology into use by the public health, law enforcement and intelligence communities.

Biological Toxin Detection. We have developed a prototype of a simple, compact sensor system for detection of biological toxins, viruses, and bacteria. The prototype has been sent to a customer for use and evaluation. Our initial efforts have been focused on the development of a single-channel, hand-held, battery operated instrument for detection of cholera and ricin toxins within environmental samples. This sensor approach offers high sensitivity and specificity, simplicity of use, and rapid response time (5-10 minutes).

Chemical Detection. Los Alamos has also developed sensors for detecting chemical threats. For instance, the Swept Frequency Acoustic Interferometer (SFAI) can be used to determine the composition of suspected chemical weapons without opening up the weapon or disturbing it. These devices are hand-carried and have been tested extensively. The technology is so sensitive that it can easily distinguish between the contents of cans of Coke® and Diet Coke®. Research is also moving forward employing fuel cell technology for development of an inexpensive, small and highly sensitive chemical agent vapor detector.

Nuclear and Radiological Countermeasures

As described earlier, the radiological and nuclear threat must be dealt with in marked contrast to how the chemical and biological threat is managed. For example, if you wait to detect the use of a radiological or nuclear device, in most cases, it's too late. Instead, what is critical in this area is making every effort possible to secure materials at their source and ensure that terrorists cannot access them.

Securing Materials at their Source

The DOE/NNSA Materials Protection, Control and Accounting (MPC&A) program is the first line of defense against nuclear terrorism. With the dissolution of the Soviet Union, NNSA/DOE estimates that Russia inherited approximately 850 tons of highly enriched uranium (HEU) and plutonium. Considering the International Atomic Energy Agency definition of significant quantities, this is enough material to make more than 50,000 nuclear explosive devices. MPC&A security upgrades are complete for about 1/3 of the fissile material identified as being at risk of theft or diversion in Russia. Rapid progress is being made to increase the security of the remaining materials, but completing the effort will take several more years of intensive work.

Whereas in the past nonproliferation efforts were focused on weapons-usable materials, today there is a recognition that other radiological materials (used for industrial, medical and research purposes) pose a threat in the form of radiological dispersal devices (RDDs), or "dirty bombs." Los Alamos is actively working with DOE/NNSA and counterparts in Russia to develop strategies to secure radiological sources that pose a threat in the form of a dirty bomb.

Thousands of radiological sources are used in the U.S. for research, medical and industrial applications. The Nuclear Regulatory Commission plans to strengthen control of the sources it licenses for these uses. The DOE and its predecessor agencies originally produced radiological sources for a variety of defense and civilian applications. These so-called "orphan sources" are being recovered by Los Alamos and repackaged as transuranic waste. More than 3,000 sources have been recovered to date. The pace of this recovery effort will likely increase to cover the more than 5,000 sources remaining.

Second Line of Defense

The Second Line of Defense (SLD) program has the mission to detect and recover any nuclear material that may slip through the first line of defense described above. The program works to strengthen Russia's overall capability to prevent the illegal transfer of nuclear materials, equipment, and technology to would-be proliferators. The immediate goal of the program is to equip Russia's most vulnerable border sites with nuclear detection equipment. A future goal is to establish a sustainable counter-nuclear smuggling capability in Russia. SLD provides training programs for front-line inspectors, and purchases detection equipment that can “sniff” out nuclear materials.

Protecting U.S. Borders, Bases and Cities

This area, in effect the third line of defense, strives to detect radiological or nuclear materials at U.S. ports of entry. For several federal agencies, including the U.S. Coast Guard and the U.S. Customs Service, we are providing information on handheld radiation detectors and isotope identifiers. We are providing advice on what instruments to buy, and instructing operators in their use. Los Alamos is actively involved in a maritime surveillance study that analyzes potential vulnerabilities of commercial shipping.

Los Alamos is also playing a role in helping to protect U.S. military bases. One example of this is a joint NNSA and Defense Threat Reduction Agency effort. Its goal is to improve the Department of Defense’s ability to detect, identify, respond, and prevent unconventional nuclear attacks by national, sub-national, or terrorist entities. The project combines technology and resources from both agencies to develop, deploy, test and demonstrate nuclear protection systems and networks at four different U.S. military installations. This effort is currently underway and involves Los Alamos and several other NNSA and DOE laboratories. If successful, the systems will be applicable to civilian urban areas.

Radiation Sensors and Detection Systems

Handheld Search Instruments. Handheld instruments are those that a police officer, customs inspector, or similar official can use to search for radioactive material on a person or in a suspicious package. They can identify the isotope emitting the radiation—an enhancement that allows a user to distinguish between benign radiation emitters such as radiopharmaceuticals or

smoke alarms, and the weapons-usable material that we want to interdict. Los Alamos has developed a new handheld instrument with a Palm™ interface that enables users to distinguish between radiation sources within seconds. The Palm™ unit can provide data about the nature of the nuclear source at hand and the isotopes present. Los Alamos is exploring commercial licensing and production for this handheld search instrument. Earlier versions, the so-called GN (gamma-neutron) series of handheld instruments have already been commercialized.

Package Monitor. The Laboratory has developed systems to detect nuclear materials, particularly hard-to-detect ones such as uranium-235, which might be missed by regular search instruments. An example of this is a newly developed package monitor that detects nuclear material in parcels via neutron interrogation. A prototype of the package monitor is currently being field-tested at a U.S. Customs facility.

Portal Monitors. Portal monitors are specialized radiation sensors in physical packages that are optimized for detecting radiation from nuclear materials as a pedestrian or vehicle passes through a choke point. Los Alamos is the DOE repository of portal-monitoring expertise and has helped developed the technical standards for portal monitor performance. LANL has placed portal monitors around the world in support of the nuclear Second Line of Defense program as well as domestic and international safeguards programs. Currently, LANL is involved in the technical evaluation of portal monitors from all U.S. vendors against the technical standards.

Active Interrogation of Cargo Containers. Los Alamos is working with Idaho National Engineering and Environmental Laboratory and commercial partner ARACOR to develop and test a system that actively interrogates large cargo containers (air, sea, rail, and road) to determine if there is any nuclear material present. The system, a large U-shaped structure with a linear accelerator on one side and x-ray detectors on the other, can be driven over a cargo container to produce an x-ray image. The image shows neutron emissions, which are a signature of nuclear material.

Long-Range Alpha Detector. The LRAD is potentially valuable for sampling volumes of air or extensive surfaces where an alpha emitter may have been dispersed, and thus might be used in response to radiation-dispersal attacks. LRADs have been used for environmental monitoring at places where dispersed uranium is a problem. An LRAD implementation for radon monitoring

has been commercialized by Eberline and could be rapidly adapted to the contamination-monitoring role.

EMERGENCY PREPAREDNESS AND RESPONSE

Los Alamos plays an important role within the area of nuclear emergency response. The largest and the most well-known team in this area is the DOE-managed NEST team. NEST was created in 1975 in response to concerns over nuclear terrorism activity. Its effectiveness is due to well-established interagency relationships including significant Department of Defense and FBI collaboration. NEST is focused on responding to a threatened act involving radiological or nuclear materials or devices. Among the range of potential terrorist threats involving weapons of mass destruction, the nuclear response infrastructure and capabilities are the most mature and capable of addressing the threat. NEST includes the capabilities to search for, diagnose, and disable an improvised nuclear device.

NEST depends on a team of highly dedicated individuals at the national laboratories and facilities throughout the DOE-complex who volunteer their expertise to this program. Los Alamos' NEST and related activities are funded at approximately $10 million in fiscal year 2002. More than 100 Los Alamos scientists and engineers are involved in various aspects of the NEST program. Nearly all are involved in other parts of the Laboratory's research in nuclear weapons or threat reduction. Many of the employees who work part-time on NEST are involved with more than one team within the NEST program.

It is important to note that NEST is more than a group of scientists who stand at the ready with pagers on their belts, waiting to be contacted to respond to a crisis. NEST team members at the DOE and NNSA laboratories, including Los Alamos, are involved in a wide range of related activities including research and development into diagnostic tools, disablement techniques, and computer simulations and modeling; working with the intelligence and law enforcement communities on the analysis of threats and the development of analytical tools; training of employees from other government agencies in environments that allow hands-on work with the actual nuclear materials that they might encounter in the field; and providing subject-matter experts when required. Los Alamos has the lead within NEST for development of nuclear

diagnostic tools to help determine the nature of the suspected threat device and for maintenance of what is called the "home team," a group of experts parallel to those that would be deployed in the field who can provide analysis, advice and technical support.

Los Alamos is involved to varying degrees in all aspects of the national NEST program. The activities of the national team, and Los Alamos' role, are as follows.

Search Activities. Los Alamos is primarily involved in research and evaluation of detectors used for search.

Joint Tactical Operations Team (JTOT). JTOT is a partnering of DOE and DoD expertise that provides advice or direct assistance to render safe a suspect malevolent employment of a nuclear device by terrorists or others and to perform a nuclear safety assessment for the eventual safe disposition of the device. Los Alamos plays a major role in the JTOT mission and is involved in maintaining management oversight, render-safe capability, diagnostics capability, emergency response home-team capability, a watchbill (a group of experts who are on call 24 hours-a-day, seven days-a-week, year-round), communications support and deployable equipment, and contingency planning.

Real Time Radiography. This system uses a portable source of x-rays to look at a suspect object in real time, without moving or disturbing the object. Using this technique, we can identify electronic components within the object, yielding important data for action decisions. Just as a dentist uses an x-ray to locate a cavity, we can use this system to locate where to drill a suspect object, disrupting its electronics and disabling other components. This system was adapted from commercially available equipment and enhances what is available to most emergency responder units.

Accident Response Group (ARG). ARG is responsible for dealing with incidents involving a U.S. weapon, commonly referred to as a "Broken Arrow." Los Alamos has experts on the ARG roster that may be called upon if their particular set of knowledge is necessary to deal with the given situation.

Disposition. These assets support both the JTOT and the ARG team, making decisions about the ultimate disassembly and disposition of a device after it has been made safe to move and ship to a remote location.

Consequence Management. Following an incident, this team is involved in the immediate monitoring of any potential radiological dispersal and in monitoring and forecasting that can advise responders on issues of evacuation and treatment.

Attribution. This area involves drawing upon capabilities from the U.S. weapons testing program to analyze samples and draw forensic inferences about a threat device. In the case of a nuclear detonation or seizure of a weapon (or precursor material) it will be necessary to attribute quickly and accurately the material/item/incident to the perpetrators through an understanding of the materials used, type of device, yield produced or anticipated, the source of the technology and the pathway(s) that lead to the event. This requires an integrated national security program that draws on the broad based technical expertise available in NNSA as well as key NNSA facilities and analytical capabilities.

Radiological Assistance Program (RAP). Related to but separate from NEST, DOE and Los Alamos maintain response plans and resources to provide radiological assistance to other federal agencies; state local, and tribal governments; and private groups requesting such assistance in the event of a real or potential radiological emergency. The Los Alamos RAP organization provides trained personnel and equipment to evaluate, assess, advise, and assist in the mitigation of actual or perceived radiological hazards or risks to workers, the public, and the environment. This Los Alamos capability supports associated activities throughout RAP Region Four: Kansas, Oklahoma, Texas, Arizona, and New Mexico.

CONCLUSION

Los Alamos is a national laboratory with a broad set of capabilities in the area of homeland security and a long history of serving the nation in this area. As President Bush stated in his June 6, 2002, address to the nation, "In the war against terrorism, America's vast science and technology base provides us with a key advantage." Our capabilities will continue to be at the service of the nation.